

KAZAK, N.A., kand. tekhn. nauk (Moskva); MYASNIKOV, A.V., inzh. (Moskva);  
ZHURILIN, V.A. (Sverdlovsk)

Concerning G.I. Kornilov's article "Economic expediency of  
reservation networks in the electric power supply of industrial  
enterprises. Elektrichestvo no.11:82-84 N '65.

(MIRA 18:11)

ZHURILIN, V.A., Inzh.

Economic effectiveness of increasing the reliability of power  
generating equipment. Teploenergetika 12 no.8:76-78 Ag '65.  
(MIRA 18:9)

1. Ural'skiy filial AN SSSR.

KHAPILOV, Yu., mladshiy nauchnyy sotrudnik; ZHURILOV, V., mladshiy nauchnyy sotrudnik

Use by foreign countries of plastics and synthetic materials in shipbuilding (from "Quarterly Transactions of the Institute of the Institute of Naval Architecture," no.3, July 1958). Mor.flot 19 no.8: 38-40 Ag '59, (MIRA 12:11)

1. Institut kompleksnykh transportnykh problem AN SSSR.  
(Shipbuilding) (Plastics)

SYRMAY, A.G., nauchnyy sotr.; OBERMEYSTER, A.M., nauchnyy sotr.;  
BRONFMAN, A.I., nauchnyy sotr.; SHIMKO, K.N., kand. tekhn.  
nauk; PARAKHONSKIY, B.M., kand. ekon. nauk. Prinimali ucha-  
stiye: ZHURILOV, V.I., nauchnyy sotr.; ZUBKOV, M.I., nauchnyy  
sotr.; SHVARTS, G.L., nauchnyy sotr.; MIKHEYEV, A.P., doktor  
tekhn. nauk, prof., otv. red.; BYKOV, I.K., red. izd-va;  
DOROKHINA, I., tekhn. red.

[Water and air transportation in capitalist countries: trends in  
the development of equipment] Vodnyi i vozdushnyi transport kapita-  
listicheskikh stran; tendentsii razvitiia tekhnicheskikh sredstv.  
Moskva, Izd-vo Akad.nauk SSSR, 1961. 350 p. (MIRA 15:1)

1. Akademiya nauk SSSR. Institut kompleksnykh transportnykh pro-  
blem.

(Merchant marine)

(Aeronautics, Commercial)

SYRMAY, A.G.. Prinsipali uchastiye. ZHURILOV, V.I., mlad. nauchnyy sotr.;  
KANTOROVICH, Ya.B., kand. tekhn. nauk, retsenzent; VORONOV, Ye.K., glav.  
ekonomist, retsenzent; OBERMEYSTER, A.M., otv. red.; DOBSHITS, M.L.,  
red. izd-va; SUSHKOVA, L.A., tekhn. red.

[Method of deciding upon the running speed and carrying capacity of  
seagoing vessels] Metodika obosnovaniia skorosti khoda i gruzopod'  
emnosti morskikh sudov. Moskva, Izd-vo Akad. nauk SSSR, 1961. 50 p.  
(MIRA 14:11)

1. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'-  
skiy institut morskogo transporta Ministerstva morskogo flota SSSR  
(for Voronov). 2. Institut kompleksnykh transportnykh problem AN SSSR  
(for Zhurilov).

(Naval architecture)

ZHURIN, A.

"Hydromechanization of the planting of vineyards on the kolkhozes and state farms in the Soviet Union."

p. 143 (Mezhduna Rodnyi Selskokhoziaistvennyi Zhurnal, Vol. 2, No. 2, 1958, Sofia, Bulgaria).

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 12, Dec. 58.

ZHURIN, A.B., red.

[Viticulture; achievements of science and advanced practices]  
Vinogradarstvo (dostizhenia nauki i peredovoi opyt). Moskva,  
Gos. izd-vo selkhoz lit-ry, 1958. 203 p. (MIRA 11:10)  
(Viticulture)

GUSEVA, A.M.; SHEFFER, V.V.; SHIN, P.V.; ZHURIN, A.B.; TIKHONOV, N.P.;  
KLYUSHKIN, P.A.; PUL'SON, R.Kh.

Local information. Zashch. rast. ot vred. 1 bel. 8  
no.10:59-60 0 '63.

(MIRA 17:6)



ZHURIN, A.B.

Conference on phylloxera control. Zashch. rast. ot vred. i bol. 3  
no.3:62-63 My-Je '58. (MIRA 11:6)

1. Glavnyy agronom-inspektor po vinogradarstvu Ministerstva sel'skogo  
khozyaystva SSSR.

(Phylloxera)

ZHURIN, Aleksey Borisovich; RUBIN, Semen Moiseyevich; TAIROVA, V. N.,  
redaktor; BALLOD, A.I., tekhnicheskiiy redaktor.

[Viticulture manual] Posobie po vinogradarstvu; Izd.2-oe, ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1956. 229 p.

(MLRA 10:6)

(Viticulture)

ZHURIN, A. B., jt. au.

Rubin, S. M.

A manual on viticulture Moskva, Gos, izd-vo sel'khoz. Lit-ry, 1950. 222p.

1. Viticulture--Handbooks, manuals, etc. 2. Viticulture --Russia. I. Zhurin, A. B. jt. au.

USSR/Cultivated Plants - Fruits. Berries.

M-6

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30086

Author : Zakharova, Ye.I., Zhurin, A.D.

Inst : -

Title : The Viticulture of Hungary.

Orig Pub : Sad i ogorod, 1957, No 9, 60-63.

Abstract : No abstract.

Card 1/1

KOLESHNIKOV, Venedikt Andreyevich, prof., doktor sel'skokhoz.nauk; ZHURIN, Aleksey Borisovich, agronom; KAPTSINEL', Mikhail Abramovich, agronom; KAPTSINEL', Anna Petrovna, agronom; KOVAL', Alla Alekseyevna, kand.sel'skokhoz.nauk; KORCHAGIN, Vladimir Nikolayevich, entomolog; ZUBAREV, N.A.; LUR'YE, B.D., red.; RAZGULYAYEVA, N.G., tekhn.red.

[Amateur fruitgrower's reference manual] Kalendar'-spravochnik sadovoda-liubitelia. Moskva, Izd-vo M-vs sel'.khoz.SSSR, 1959. 494 p. (MIRA 13:4)

(Fruit culture)



101 AND 102 GROUPS

PROCESSING AND PROPERTIES INDEX

2

Stability of magnesium in the chlorides of magnesium, potassium and sodium. A. L. Zhurav. *Metallurg.* 10, No. 4, 47-50 (1935).—Mg was heated in a steel bomb with  $MgCl_2$ ,  $MgCl_2 + NaCl$ , and  $MgCl_2 + KCl$  to 800–1300° for 2.5 hrs., quenched, and analyzed. The sol. of Mg in  $MgCl_2$  at 800° is 0.3% in  $MgCl_2 + NaCl$  it is much less, and in  $MgCl_2 + KCl$  it is still less. Neither  $MgCl_2$  nor  $MgCl_2 + KCl$  is at room temp.

H. W. Rathmann

ADN-55A METALLURGICAL LITERATURE CLASSIFICATION

ZHURIN, A. I.

RT-1601 (Solubility of aluminum in cryolite) O rastvorimosti aliuminiia v rasplavlennom kriolite.

LEGKIE METALLY 6(5-6): 27-31, 1937



1ST AND 2ND ORDERS		PROCESSING AND PROPERTY DATA	
<p><i>Ca</i></p> <p>Electromotive forces of the Daniell-type and concentration-type cells with fused electrolytes at high temperatures. <i>A. L. Zhurav, Trans. Leningrad Ind. Inst. 1939, No. 1, Ser. Met. No. 1, 74-84.</i>—Measurements of the e. m. f. of cells of the Daniell-type were made with and without sepp. the salts with a glass partition. Measurements with glass give uncertain results, as they depend upon the type of glass and the duration of the exp. Ksp's gave best results in the first minutes. The glass plates decompose, particularly in cells using Ag/AgCl. It is better to make the measurements by use of partitions with openings similar to those suggested by Lorenz, even though the results are more complex. Data obtained for the concn. cell of the type <math>Pb PbCl_2-KCl  PbCl_2-KCl Pb</math> indicate that a complex is formed between <math>PbCl_2</math> and <math>KCl</math>. B. Z. K.</p>		<p>4</p>	
<p>ASA 56A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>REGIONAL DIVISION</p>		<p>REGIONAL DIVISION</p>	
<p>1ST ORDER NO.</p>		<p>2ND ORDER NO.</p>	
<p>1ST ORDER NO.</p>		<p>2ND ORDER NO.</p>	

4

Analysis solution of cobalt-nickel ores. A. I. Zhukh and N. V. Zverevskii. *Trans. Leningrad Inst. 1951, Vol. 80, No. 4, 98-104* (German summary). - Co-enriched slags, analysing Ni 48.3, Co 7.78, Fe 14.76, Cu 10.97, S 18.32%, from roasted crude Cu-Ni(Fe, Co) sulfide ores, were mounted as anode, 120 X 80 X 10 mm., enclosed in a canvas bag, between two Cu cathodes 120 X 80 mm., in a glass container of 1.8 l.; distance between the electrodes 45 mm. Initial electrolyte  $H_2SO_4$ , 150 g./l. Temp. 40° and 60°, c.d. 100, 150, and 250 amp./sq. m. The cathodic current efficiency,  $\eta_c$ , refers to deposition of Cu; the anodic current efficiency,  $\eta_a$ , is the fraction of the total current expended on anodic soln., as sulfates, of Cu, Ni, Fe, and Co.  $\alpha$  is the degree of extraction in %. At 40°, duration of electrolysis, 194.3 amp.-hrs. and with c.d.s. 100, 150, 250 amp./sq. m.,  $\eta_a$  is, resp., 6.60, 10.90, 6.49%;  $\eta_c$ , 68.00, 73.50, 60.25%;  $\alpha$  77.1, 80.9, 79.6;  $\alpha$  78.0, 83.8, 84.0%. At 60°, same three c.d.s.,  $\eta_a$  is resp., 7.74, 10.50, 9.88%;  $\eta_c$  71.60, 80.30, 74.12%;  $\alpha$  83.24, 80.80, 90.80%;  $\alpha$  82.50, 80.30, 90.30%. Data are also given on the distribution of the constituents of the anode between the sludge and the electrolyte, example: at 40°, c.d. 150 amp./sq. m., the Ni, Co, Fe, Cu, S in the sludge is, 10.3, 14.0, 11.6, 13.2, 75.0%, resp., and electrolyte, 80.7, 80.0, 88.4, 80.8, 25.0%; at 60°, same c.d., same elements, sludge, 13.2, 13.0, 14.2, 13.0, 64.8%, resp., and electrolyte, 86.8, 87.0, 85.8, 87.0, 35.2%. No satisfactory

explanation is forthcoming for the low  $\eta_a$ , inasmuch as the Fe in the electrolyte is in the form of  $Fe^{2+}$  and no  $Fe^{3+}$  is found; by the anode potentials (from 0.6 v. at 100 amp./sq. m. and 0.9 v. at 250 amp./sq. m. (against the satd. calomel electrode)) oxidation of Fe might take place, followed by reduction at the cathode; there is no evolution of  $O_2$  at the anode. The Cu dissolved at the anode is almost entirely deposited on the cathode; less than 1 g./l. remains in the electrolyte. The sludge constitutes about 30% of the loss of wt. of the anode; it consists of metal sulfides and excess elementary S (total S 50-60%). After removal of the excess S, the sludge can be worked up again for metals in the same way as the initial slag. With higher temp. and with higher c.d., both  $\eta_a$  and the  $\alpha$  for Ni, Co, and Cu increase. Consequently, from the point of view of extn. of Ni and Co and of extn. and deposition of Cu, it is advisable to use a higher temp. and higher c.d. even though the consumption of energy also increases with temp. and with c.d.: at 250 amp./sq. m., extn. of Ni and Cu requires 30% more energy than at 100 amp./sq. m. The electrolysis can be prolonged for 7-8 consecutive days without inconvenience. N. Thon

ASH-11A METALLURGICAL LITERATURE CLASSIFICATION

Production of nickel by electrolytic refining of a garnierite matte. A. I. Zhurav and S. Kavitskaya. *Tsvetnyye Metally*, No. 1, 80-8 (1940); *Chem. Zvesti.* 1941, 1, 1221. Expts. were made on electrolytic refining of a garnierite matte of the compn.: Ni 78.4, Cu 1.0, Fe 0.02 and S 18.78%. The duration was 2 days or less, at 75 amp./sq. m. and 80°; the energy consumed was 1.95 kWh/kg., i. e., approx. as much as in refining black Ni oxide. The extraction was 95% Ni. The current efficiency was 90%. The anode efficiency was lower, from 20-30% of the current was spent in the oxidation of S at the anode. The electrolyte became enriched in SO, and impoverished in Ni. Therefore, NiO had to be added periodically. The anode slime amounted to 25% of the loss of wt. of the anode (0.2-0.4 g./amp.-hr.). It contained 18-25% Ni and adhered firmly to the anode but without interfering with the progress of the electrolysis if the latter was of short duration. M. Hosh

Current efficiency of the electrolytic production of magnesium. A. I. Zhurin and O. G. Desyatnikov. *Trans. Leningrad M. T. Kalinin Polytech. Inst.* 1946, 207-208. A study of the electrolytic production of Mg from fused electrolytes and effect of the concn. of  $MgCl_2$  on current efficiency. The curve has a max. at 15.5%. The drop of the current efficiency depends on 2 factors: soly. of metallic Mg in the electrolyte and discharge of soly. of the alk. metals at the cathode. At concn. of  $MgCl_2$  lower than 15% the first factor prevails. The soly. of metallic Mg increases with the concn. of  $MgCl_2$ ; at concn. higher than 20%, the second factor prevails (simultaneous discharge of Na and partly K takes place). In this second region the drop of current efficiency is the sharper the higher the c. d. The current efficiency depends also on the ratio  $KCl/NaCl$  and is higher when the ratio is larger than unity. At low concn. of  $MgCl_2$  the anode efficiency is lower than the cathode efficiency because Cl is evolved partly at the cathode and does not react with Mg, while Mg reaching the anode is completely transformed into chloride. The freely evolved Cl represents the difference between the anode and the cathode efficiencies. At higher concn. of  $MgCl_2$  the anode efficiency is higher than the cathode efficiency because the loss of current at the cathode is conditioned not only by the soln. of the metal and their chlorides in the electrolyte but also by the deposition of alkali metal, an appreciable portion of which diffuses to the surface of the electrolyte and is there oxidized by the O of the air. N. Golitski

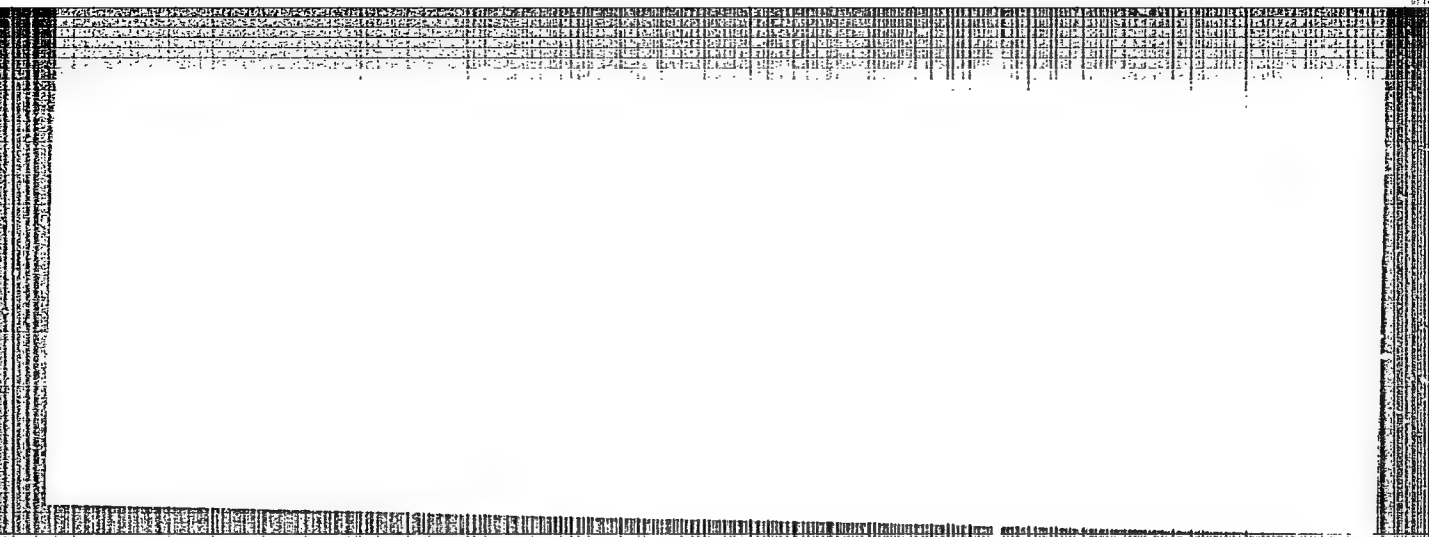
ZHURIN, A.I.; SHOYKHET, M.G.

Buffer properties of nickel electrolytes and the formation of  
hydrates occurring in them. Zhur. prikl. khim. 29 no.4:583-588  
Ap '56. (MIRA 9:11)

1. Leningradskiy politekhnicheskij institut imeni M.I. Kalinina.  
(Hydrates) (Electrolytes) (Nickel)

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**APPROVED FOR RELEASE: 07/16/2001**

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137-58-6-11979

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 113 (USSR)

AUTHORS: Zhurin, A.I., Shoykhet, M.G.

TITLE: Buffering Properties of Nickel Sulfate Solutions and the Formation of Hydrates in These Solutions (O bufernykh svoystvakh rastvorov sul'fata nikelya i gidratoobrazovaniya v nikh)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 173-180

ABSTRACT: .. The incipient formation of hydrates in Ni electrolytes was investigated experimentally. Some considerations are presented concerning the discrepancy between the pH data on the formation of hydrates as given by A.L. Rotinyan and V.Ya. Zel'des (Zh. prikl. khimii, 1950, Vol 23, p 717) and the data obtained in earlier research on this problem. In addition, the authors comment on the mechanism of the action of such buffer additives as  $H_3BO_3$ ,  $(NH_4)_2SO_4$ , and  $CH_3COOH$  in the course of the electrolysis. See also RzhMet, 1957, Nr 4, abstract 5717. 1. Electrolytes--Properties 2. Nickel sulfate solutions  
--Properties 3. Hydrates--Analysis N.P.

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Zhurin, A.I.

137-58-5-9307

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 74 (USSR)

AUTHORS: Zhurin, A.I., Shoykhet, M.G.

TITLE: The Effect of Organic-compound Additives on the Process of Electrolytic Deposition of Nickel From Sulfate Solutions (Vliyan-  
iye primesey organicheskikh soyedineniy na elektroliticheskoye  
osazhdeniye nikelya iz sul'fatnykh rastvorov)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 181-190

ABSTRACT: A study of the effect of certain organic compounds on the cur-  
rent efficiency and the quality of metal being deposited during  
electrolytic refining of Ni. It is established that of all compounds  
which are leached out of wood by the electrolyte, the water-  
soluble constituents of wood and linen rag are the most harmful.  
On conversion to C content, the content of water-soluble com-  
pounds must not exceed 20 mg/l. As the solution is freed from  
Fe and Co, the organic compounds become oxidized and are re-  
moved. Whenever large amounts of wood or linen rag are intro-  
duced into the process, it is essential that they be treated pre-  
liminarily with hot water for a period of 1-2 days so as to remove  
water-soluble compounds contained in the surface layer. Wood  
may be treated with a 2% lye solution. G.S.

Card 1/1

1. Nickel--Electrodeposition 2. Electrolytes--Properties 3. Electro-  
lysis--Effectiveness 4. Organic compounds--Electrolysis



Zhurin, A.I.

137-58-5-9306

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 74 (USSR)

AUTHORS: Zhurin, A.I., Ivanov, L.A.

TITLE: Electrolytic Precipitation of Nickel From Sulfate Solutions With Addition of Ammonium Salts (Elektroliticheskoye osazhdeniye nikelya iz sul'fatnykh rastvorov s primeneniym dobavok ammoniynykh soley)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 191-203

ABSTRACT: Studies were performed in order to determine conditions most suitable for the precipitation of Ni from solutions containing buffering additives in the form of ammonium salts; the quality of the Ni precipitates was also studied. It was established that range of the buffer action of solutions buffered with ammonium salts is greater than that of solutions buffered with boric acid. Good-quality elastic deposits are obtained from sulfate solutions buffered with ammonium sulfate containing small amounts of Cl ion (5 g/l ). The S and H content in these deposits is not greater than in deposits obtained from solutions with boric acid.

G.S.

Card 1/1

1. Nickel--Electrodeposition
2. Ammonium salts--Applications
3. Electrolytes--Properties

137-58-6-12028

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 120 (USSR)

AUTHOR: Zhurin, A.I., Pyunnenen, S.P.

TITLE: Combined Influence of Additions of Manganese with Iron, Cobalt, and Antimony Present in Solutions During Electrolytic Deposition of Zinc (Sovmestnoye vliyaniye primesi margantsa s zhelezom, kobal'tom i sur'moy v rastvorakh pri elektroliticheskom osazhdenii tsinka)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 204-211

ABSTRACT: The influence of individual admixtures (Mn, Fe, Co, Sb) as well as the combined effect of Mn and Fe, Mn and C, Mn and Sb, and Sb and Co were studied in the process of electrolytic deposition of Zn. The following facts were established: 1) the presence of a considerable quantity of  $Mn^{2+}$  ions (up to 5-20 g/l ) results in a marked reduction in current yield; this condition is due to the oxidation of  $Mn^{2+}$  to  $MnO_4^-$  and the reduction of  $MnO_4^-$  to  $Mn^{2+}$ ; 2) compared with Mn the Fe reduces the current yield even more abruptly; this is explained by the fact that the  $Fe^{2+}$  is oxidized to  $Fe^{3+}$  and that the Fe may be

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137-58-6-12028

# Combined Influence of Additions of Manganese (cont.)

deposited on the cathode (accompanied by intense evolution of  $H_2$ ); introducing gelatin increases the current yield. 3) When simultaneously present in the same solution, the elements Mn and Fe mutually reduce each other's action, a fact which is attributable to mutual oxidation-reduction processes occurring in the electrolyte (E); 4) Combined action of Mn and Co, Mn and Sb, and Co and Sb reduces the current yield to a greater degree than could be expected in the case of concurrent but independent action; this condition is explained by the assumption that the more abrupt change in the surface of the cathode (as compared with the action of only a single ingredient) is responsible for a more abrupt change in the density of current; 5) introduction of gelatin into the E greatly suppresses the action of the impurities, particularly of such substances as Sb, Co, etc., i.e., impurities which are separated out at the cathode; 6) experiments in which a baffle was employed have shown that the current yield of Zn in a neutral E is very great even if considerable quantities of impurities are present.

N.P.

1. Zinc--Electrolytic deposition
2. Electrolytes--Chemical properties
3. Manganese--Chemical reactions
4. Iron--Chemical reactions
5. Cobalt--Chemical reactions
6. Antimony--Chemical reactions

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ZHURIN, A.I.

137-58-5-10269

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 198 (USSR)

AUTHORS: Gvozdeva, I.I., Zhurin, A.I.

TITLE: The Electrochemical Properties of Rhenium (Elektrokhimicheskiye svoystva reniya)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 212-224

ABSTRACT: The following questions are investigated in this study: a) the relationship of Re plating potential to the strength of the  $\text{KReO}_4$  (5, 10, 15, 20 g  $\text{KReO}_4$ /liter;  $60^\circ\text{C}$ , pH 1.3; b) the effect of pH on plating potential ( $60^\circ$ , 10 g  $\text{KReO}_4$ /liter, pH varied from 0.7 to 1.4); c) effect of temperature (pH 1.3, 10 g/liter, Cu cathode, temperature varied from 20 to  $90^\circ$ ); d) effect of cathode material (Re, Ni, Mo, Cu, Fe, 10 g  $\text{KReO}_4$ /liter, pH 1.3,  $60^\circ$ ). It is found that the equilibrium potential of Re in a solution containing 10 g  $\text{KReO}_4$ /liter and 15 g  $\text{H}_2\text{SO}_4$ /liter is +0.353 v at  $30^\circ$ . The balance of electrolysis products on the electrodes indicates the occurrence of a process of  $\text{O}_2$  liberation at the anode, while two processes - liberation of Re and of  $\text{H}_2$  - occur at the cathode. The optimum conditions for deposition of Re from a sulfate  $\text{KReO}_4$  solution are determined. The best Re coatings at

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137-58-5-10269

The Electrochemical Properties of Rhenium

maximum current efficiency and minimum consumption of electric power are obtained when 1 liter of water contains 15 g  $\text{KReO}_4$  and 12-15 g  $\text{H}_2\text{SO}_4$  (pH 0.9-1), at 15 amps/ $\text{dm}^2$  and 85-90°.

L.A.

1. Rhenium--Electrochemical properties

Card 2/2

3/149/60/000/03/01/009

AUTHOR: Zhurin, A.I.  
 TITLE: On Electrolytic Nickel Refining in Sulfate-Chloride and Chlorous Solutions  
 PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, 1960, No 3, pp 54 - 61

TEXT: Information is given on results of experimental investigations into processes of electrolytic Ni refining in sulfate-chloride and pure chlorous solutions. The experiments were performed with the participation of M.G. Shoykhet, V.S. Ponomarev, B.P. Gorshkov, and A.F. Vikharev. The following processes were studied: the effect of chlorine ions on anode and cathode potentials; the effect of  $Cl^-$  concentration on current efficiency; the effect of the circulation rate and current density on current efficiency and the quality of the cathode nickel; long-lasting electrolysis with different concentration of chlorine ions; behavior of metals of the platinum group; refining of chlorous nickel solutions from iron and cobalt. The totality of results obtained leads to the following conclusions: pure chlorous solutions

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9/149/60/000/03/01/009

On Electrolytic Nickel Refining in Sulfate-Chloride and Chlorous Solutions

with high concentration of Ni ions or sulfate-chloride solutions with high concentration of Ni and chlorine with a relatively low content of sulfate ions may be used to intensify the operation of electrolytic shops; there are no considerable investment costs required; the efficiency of the shops would increase by a factor of 1.5 - 2. Moreover, the efficiency of the electrolytic bath may be raised by using high concentrations of Ni, raised current densities and reduced circulation rates of the solution, without enlarging the capacity of devices for the purification from iron and cobalt. There are 6 tables, 6 graphs and 5 references; 3 Soviet and 2 English.

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Poly-technical Institut), Kafedra elektropirometallurgii tsvetnykh metallov (The Chair of Electropirometallurgy of Non-Ferrous Metals)

SUBMITTED: June 6, 1969

Card 2/2

BAYMAKOV, Yuriy Vladimirovich; ZHURIN, Aleksandr Ivanovich; LEVIN, A.I.,  
 proi., doktor tekhn. nauk, retsenzent; SMIRNOV, V.I., prof.,  
 retsenzent; STENDER, V.V., prof., retsenzent; CORBUNOVA, K.M.,  
 prof., doktor khim. nauk, red.; PAKHOMOVA, G.N., kand. tekhn.  
 nauk, red.; MARENKOV, Ye.A., red.; MISHARINA, E.D., red.izd-va;  
 MIKHAYLOVA, V.V., tekhn. red.

[Electrolysis in hydrometallurgy]Elektroliz v gidrometallurgii.  
 Moskva, Metallurgizdat, 1963. 616 p. (MIRA 16:2)

1. Kafedra tekhnologii elektrokhimicheskikh proizvodstv Ural'skogo  
 politekhnikheskogo instituta (for Levin). 2. Kafedra metallurgii  
 zavetnykh metallov Ural'skogo politekhnikheskogo instituta, Dey-  
 stvitel'nyy chlen Akademii nauk Kazakhskoy SSR (for Smirnov).
3. Chlen-korrespondent Akademii nauk Kazakhskoy SSR (for Stender).  
 (Hydrometallurgy) (Electrometallurgy)



ACCESSION NR: AT4026277

B/2563/63/000/223/0069/0074

AUTHOR: Zhurin, A.I.; Li, Hang-kuan

TITLE: Electrolytic purification of crude indium containing tin and cadmium

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy\*, no. 223, 1963. Metallurgiya tsvetny\*kh metallov (Metallurgy of nonferrous metals), 69-74

TOPIC TAGS: indium, indium refining, electrolytic refining, indium purification, indium electrolysis, tin, cadmium.

ABSTRACT: Crude indium may be purified by many methods, including electrolysis. In the present investigation, the authors used electrolytic purification of indium on solid indium anodes and Ti cathodes. The crude indium contained tin and cadmium. Spectral analysis was used to determine the content of tin and cadmium in the material. The accuracy of measurement was generally 0.001% and in some cases was increased to 0.0005%. It was found that during the anode dissolution of crude indium, most of the tin remains in the sludge, while cadmium together with indium pass into the solution (see Fig. 1 of the Encl.). Tin is deposited together with indium on the cathode, only its extraction coefficient is less than unity and depends inversely on the current density. Cadmium is deposited together with indium only at high concentrations. Complete elimination of tin and cadmium from solution

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ACCESSION NR: AT4026277

may be accomplished by hydrogen sulfide precipitation in two stages at pH 0.37 and then 0.9. At pH=2, the current yield at the cathode is essentially 100% and that at the anode exceeds 100%. It is advisable to use a titanium cathode and not an aluminum one if the electrolyte is a chloride. "The authors express gratitude to Ye. L. Grinzayd, Associate Professor of Analytical Chemistry, for consultation and help in working out the spectral method for the quantitative analysis of tin and cadmium." Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Leningradskiy politekhnicheskoy institut (Leningrad Polytechnic Institute)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 01

SUB CODE: MM

NO REF SOV: 003

OTHER: 001

Card 2/3

ZHURIN, A.I.; LI KHAN-GUAN' [Li Hang-kuan]

Electrolytic refining of crude indium containing tin and cadmium.  
Trudy IPI no.223:69-74 '63. (MIRA 17:11)

ACCESSION NR: AT4026278

8/2563/63/000/223/0075/0081

AUTHOR: Zhurin, A.I.,; Chao, Ching-sheng

TITLE: The direct extraction of gallium from aluminate solutions by electrolysis

SOURCE: Leningrad. Politekhnikheskiy Institut. Trudy\*, no. 228, 1963. Metallurgiya tsvetnykh metallov (Metallurgy of nonferrous metals), 75-81

TOPIC TAGS: gallium electrolysis, aluminum, aluminum refining, gallium, aluminate solution, electrolysis, mercury cathode, gallium extraction

ABSTRACT: Gallium accompanies aluminum in all its ores, including bauxite, but is normally lost during refining. The authors previously proposed the electrolytic extraction of gallium from aluminate solutions in one stage using a mercury cathode. In the present paper, they study the possibility of extracting gallium from aluminate solutions in one step using a solid cathode. In clarifying the optimal conditions for this procedure, they determined the potentials for the extraction of hydrogen from alkaline solutions on steel and gallium cathodes, as well as the extraction of gallium and hydrogen from an alkaline solution of sodium gallate. Finally, experiments were carried out on gallium extraction from both sodium gallate and aluminate solutions. The results show that it is theoretically possible

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ACCESSION NR: AT4026278

to extract over 50% of the gallium from aluminate solutions containing 0.15 - 0.20 g/liter, by electrolysis with solid electrodes. Electrolysis should be performed at 60-80C and currents of 400-600 a/m<sup>2</sup>, using steel cathodes previously coated with gallium. This electrolytic method may be combined with the production of hydrogen and oxygen. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: Leningradsky politeknicheskyy institut (Leningrad Polytechnic Institute)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 002

Card 2/2

ZHURIN, A.I.; CHZHAO TSZIN-SHEN [Chao Ching-shêng]

Direct recovery of gallium from aluminate solutions by electrolysis.  
Trudy IPI no.223:75-85 '63. (MIRA 17:11)

ACCESSION NR: AT4026279

S/2563/63/000/223/0082/0086

AUTHOR: Zhurin, A. I.; Ovchinnikov, A. V.

TITLE: Some of the electrochemical properties of indium

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy\*, no. 223, 1963.  
Metallurgiya tsvetnykh metallov (Metallurgy of nonferrous metals), 82-86

TOPIC TAGS: Indium, anode polarization, cathode polarization, indium electrochemistry, electrochemistry

ABSTRACT: Indium is acquiring great importance among the rare elements, but little has been published on its electrochemistry. For this reason, the authors measured the anode and cathode polarization curves for indium in solutions of its chloride, the overvoltage required to evolve  $H_2$ , and the yield at the anode and cathode during electrolytic refining of indium. It was found that the anodic dissolution of indium in a 0.407 N solution of its chloride proceeds at a high rate with little polarization at potentials from -0.45 to -0.42 volts, monovalent and trivalent ions being produced simultaneously. The proportion of monovalent ions increases with the current density. Meanwhile, deposition of indium at the cathode also takes place at a rapid rate with little polarization. When the current

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Card

ACCESSION NR: AT4026279

density reached a maximum value, simultaneous discharge of indium ions and hydrogen ions takes place at the cathode. The lower the pH of the solution, the lower this maximal current density. Orig. art. has: 3 figures, 5 chemical formulas, and 2 tables.

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: MM, GC

NO REF SOV: 001

OTHER: 004

Card 2/2



SHAMOV, V.N.; ZHURIN, A.I.

Gallium recovery from return aluminate alkalies by electrolysis.  
Izv.vys.ucheb.zav.; tavet.met. 8 no.2:72-78 '65.

(MIRA 1961)

1. Kafedra elektropirometallurgii tavetnykh metallov Leningradskogo  
politeknicheskogo instituta. Submitted December 24, 1963.

GANIN, V.M.; ZHURIN, A.I.

Certain electrochemical properties of cadmium in its electrolytic separation from solutions. Izv. vys. ucheb. zav. tsvet. met. 8 no.1:96-101 '65. (MIRA 18:6)

1. Leningradskiy politekhnicheskoy institut, kafedra elektropiro-metallurgii tsvetnykh metallov.



L 53942-65

ACCESSION NR: AF5016346

The yield of gallium as a function of current  
The effect

Card 2/2

ZHURIN, A.I.; OVCHINNIKOV, A.V.

Certain electrochemical properties of indium. Trudy LPI no.223:  
82-86 '63. (MIRA 17:11)

ZHURIN, A.I.

Present status of the electrometallurgy of nickel. Trudy LPI  
no.239:82-107 '64. (MIRA 17:10)

ZHURIN, B.F.

Automatic safety valve. Mashinostroitel' no.2:26 F '62.  
(Gas burners--Safety measures) (MIRA 15:2)

AYZENSHTADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.;  
 KRIMER, T.Ye.; KASHEPAV, M.Ya., kand. tekhn. nauk;  
 MERPERT, M.P., kand. tekhn. nauk; KOPERBAKH, B.L.;  
 CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN,  
 B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.;  
 MUSHTAYEV, A.F.; OGNEV, N.N.; PALEY, M.B., kand. tekhn.  
 nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk; MECHETNER,  
 B.Kh.; SOSENKO, A.B.; AVDULOV, A.N.; LEVIN, A.A., kand.tekhn.  
 nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A.,  
 kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn.  
 nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof.,  
 doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, R.I., red.;  
 CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L.,  
 tekhn. red.

[Machine-tool industry in capitalist countries] Stanko-  
 stroenie v kapitalisticheskikh stranakh. Pod red. i s pre-  
 disl. A.P.Vladzиеvskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy in-  
 formatsii mashinostroyeniya. 2. Eksperimental'nyy nauchno-  
 issledovatel'skiy institut metallorezhushchikh stankov  
 (for Vladzиеvskiy, Belogur-Yasnovskaya, Chigareva, Asval'dov,  
 Kogan).

(Machine-tool industry)



ZHURIN, B.F., inzh.

Device for determining the trajectory and speed of the cutter  
center on milling machines. Vest.mashinostr. 43 no.8:62-63

Ag '63.

(MIRA 16:9)

(Milling machines) (Recording instruments)

ZHURIN, B.F., inzh.

Deriving formulas for determining dimensions of the equidistantial  
curve for the machining of parts having the shape of scalene  
triangles and rhombs. Vest.mashinostr. 42 no.9:77-78 S '62.

(MIRA 15:9)

(Metal cutting)

Zhurin, Boris Ivanovich

II/5  
831.1  
.26  
1955

Roditel'skaya Obshchestvennost' v Promoshch' Shkole  
(The Parents in the Community as an Aid for the Schools)

Izd. 2., Ispr.

Moskva, Uchpedgiz, 1955

157 P. Illus., Tables.

Bibliographical Footnotes.

24.7700

67293

SOV/180-59-4-26/48

AUTHORS: Zhurkin, B.G., Zemskov, V.S., Petrov, D.A. and  
Suchkova, A.D. (Moscow)

TITLE: The Nature of the Quasi-Binary Germanium-Indium-Antimony  
 System

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh  
nauk, Metallurgiya i toplivo, 1959, Nr 4, pp 156-158 (USSR)

ABSTRACT: Germanium with electron-type conduction and a specific resistance 25 to 30 ohm/cm was used together with zone refined antimony and indium. Crystals were pulled from the melt. Results are given in Table 1. All the samples had electron-type conductivity and samples with high InSb content had a higher concentration of electrons than those with low InSb content. The number of current carriers varied from  $1.2 \times 10^{18}$  to  $1.9 \times 10^{19}/\text{cm}^3$ . The value for fully compensated additions is  $2.5 \times 10^{13}/\text{cm}^3$ . Thus there was an excess of Sb atoms. Experiments were carried out using the same Ge:Sb ratio and increasing the In content. Results are given in Table 2. With a ratio of In:Sb of 2.5 there is still electronic conduction very near to the compensated alloy. With In:Sb = 4.4 there is hole-type conduction. Microstructures were examined along the

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SOV/180-59-4-26/48

The Nature of the Quasi-Binary Germanium-Indium-Antimony System

length of the crystal pulled from a melt. A second phase appears (see Fig) which from microhardness tests corresponds to InSb. It does not appear, however, at temperatures greater than  $650^{\circ}\text{C}$  - the temperature of dissociation of InSb. The authors conclude that because of dissociation of InSb in fused germanium, the system does not possess the properties of a quasi-binary system. There are 1 figure, 2 tables and 8 references, 6 of which are Soviet and 2 English.

SUBMITTED: March 16, 1959

Card 2/2

67801

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24.7600

SOV/180-59-5-13/37

AUTHORS: Zhurkin, B.G., Zemskov, V.S., Petrov, D.A., and  
Suchkova, A.D. (Moscow)

TITLE: The Solubility of Indium and Antimony in Germanium and  
their Effect on some Electrical Properties of Germanium

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh  
nauk, Metallurgiya i toplivo, 1959, Nr 5, pp 86-90 (USSR)

ABSTRACT: Single crystals of germanium were pulled from melts doped  
with up to 80 wt % of indium or of antimony. [111]  
seeds were used; growth rate was 0.04 mm/min and the  
crystal was rotated at 140 rpm. Starting materials were:  
high purity germanium (25-30 ohm.cm N-type, mobility  
3600 cm<sup>2</sup>/V.sec, diffusion length ~ 1.5-2 mm); indium  
showing spectrographic traces of Fe, Al, Cu, Ca, Ni and  
antimony of Cu, As, Pb, Au, Al and P. A pure graphite  
crucible fitted with a quartz sheathed thermocouple  
(Fig 1) held a charge of 10-12 g. The pulled ingots  
were 7-9 mm diameter and 8-10 mm long. These were cut in  
half lengthways. One half was studied metallographically  
for homogeneity while Hall effect specimens (7 x 3 x 1 mm)  
were cut from the other, close to the seed and  
perpendicular to the growth axis. Resistivity and Hall

Card  
1/3

67801

SOV/180-59-5-13/37

The Solubility of Indium and Antimony in Germanium and their Effect on some Electrical Properties of Germanium

emf were measured with a potentiometer type PPTN-1 and a galvanometer type M-25/3. Resistivity measurements were  $\pm 5\%$  but Hall measurements (3700 Oe field) for the higher impurity concentrations had greater errors, from 10-50%. In determining impurity concentrations from resistivity and Hall measurements complete ionization and degeneracy were assumed. The table shows equilibrium concentrations of indium and antimony in solid and liquid germanium at various temperatures (both wt % and at % values are given). The corresponding phase diagrams are plotted in Figs 3 and 4 (compositions in at %). Solid Ge containing  $6.6 \cdot 10^{-2}$  at % In is in equilibrium with a melt containing 71.6 at % In at 620 °C, and solid germanium containing  $7.2 \cdot 10^{-2}$  at % Sb with liquid containing 70.5 at % Sb at 693 °C. Extrapolation to the eutectic horizontals suggests maximum solid solubilities of  $8 \cdot 10^{-2}$  at % In and about 0.1 at % Sb. No retrograde solid solubility was found for Sb. Fig 5 shows log-log plots (which are linear)

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2/3

6780R

SOV/180-59-5-13/37

The Solubility of Indium and Antimony in Germanium and their  
Effect on some Electrical Properties of Germanium

of resistivity vs impurity concentration for Sb (1) and  
In (2) doping.  $2.5 \times 10^{-19} \text{ Sb/cm}^3$  gave  $\sim 6 \cdot 10^{-4}$   
ohm.cm, and  $2 \cdot 10^{-19} \text{ In/cm}^3$  gave  $2 \cdot 10^{-3}$  ohm.cm.

Fig 6 shows the corresponding variations in Hall  
mobility; the plots for both holes and electrons  
varying similarly. The results presented for In are  
in good agreement with those in Ref 3.

There are 6 figures, 1 table and 14 references, of which  
3 are Soviet, 10 English and 1 German.

Card  
3/3

SUBMITTED: April 3, 1959



ZHURIN, G.

Device for the control of hopper filling with coal. Mast. ugl. 7  
no. 6:16 Ja '58. (MIRA 11:7)

1. Nachal'nik tekhnicheskogo otdela Upravleniya toplivnoy prenysh-  
lennosti Sverdlovskogo sovnarkhoza.  
(Coal handling)  
(Automatic control)

GORODETSKIY, David Yevseyevich; ZHURIN, Grigoriy Mikhaylovich;  
ZUBAREV, Leonid Aleksandrovich; ADAMOVA, L., red.;  
CHEMKO, L., tekhn. red.

[Put the reserves of the fuel industry to use] Rezervy toplivnoi promyshlennosti v deistvii. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1961. 110 p. (MIRA 15:8)  
(Coal mines and mining) (Peat)

ZHURIN, K.V., inzh.

Eliminate the shortcomings of the line-battery switch. Avtom., telen.  
i svyaz' 6 no, 7:44 JI '62. (MIRA 16:2)

1. Michurinskaya distantiya signalizatsii i svyazi Yugo-Vostochnoy  
dorogi.

(Railroads--Electric equipment)

KUKINOV, V.M.; MASOKIN, V.I.; ZHURIN, N. Ya.; RODZEVILLO, I.T.

New equipment and progressive technology. Bezop. truda v  
prom. 8 no. 9:31-33 S '64 (MIRA 18:1)

1. Nachal'nik Gubkinskoy rayonnoy gornotekhnicheskoy inspeksii  
(for Kukinov).
2. Shakhta imeni Gubkina (for Masokin, Zhurin,  
Rodzevillo).

ZHURIN, P.N., LUPPOVA, N.N., POCHUKAYOVA, A.S.

Some characteristics of the epidemiology of malaria and its control during the period of eradication [with summary in English].  
Med. paraz. i paraz. bol. 27 no.3:301-304 My-Je '58 (MIRA 11:7)

1. Iz Respublikanskoy sanitarno-epidemiologicheskoy stantsii Chuvashskoy ASSR.

(MALARIA, prevention and control, in Russia (Rus))

ZHURIN, P.N., dotsent

Intracellular inclusions in spring catarrh. Vest. oft. 69 no.2:9-11  
Mr-Apr '56. (MLRA 9:7)

1. Iz Chuvashskogo nauchno-issledovatel'skogo trakhomatovogo instituta  
(dir.--dotsent P.A.Shishkin; nauchnyy rukovoditel'--dotsent Ts.Yu.  
Kamenetskaya)

(CONJUNCTIVITIS

vernal, intracellular inclusions)

ZHURIN, P. N.

25227. ZHURIN, P. N. Epidemiologicheskii Metod Diagnostiki Infektsionnykh Boleznay, Sov. Meditsina, 1949, No. 8. S. 38.

SO: Letopis' No. 33, 1949.

USSR / Virology. Viruses of Man and Animals. Chlamydozoa.

E-2

Abs Jour : Ref Zhur - Biologiya, No 22, 1958, No. 99185

Author : Zhurin, P. N.

Inst : State Scientific Research Institute for Eye Diseases

Title : Diagnostic Meaning of Preparation - Imprints From  
Mucosa of the Eyelids

Orig Pub : Uch. zap. i inform. myetod. matyerialy. Gos. n.-i  
in-t glazn. boleyeznyey, 1957, No 5, 75-77

Abstract : No abstract given

Card 1/1



*21 APR 1956 P. N.*  
EXCERPTA MEDICA Sec.12 Vo.11/6 Ophthalmology June 57

1008. ZHURIN P. N. Chuvash Inst. of Trachoma, Cheboksary. \* Intracellular  
inclusions in vernal conjunctivitis (Russian text) VESTN.  
OFTAL. 1956, 2 (9-11) Illus. 6

A large number of epithelial cells and intracellular inclusions were found in  
imprint-smears from the palpebral mucosae of patients suffering from vernal  
conjunctivitis. They stain purple with methylene blue in aqueous solution. The  
intracellular inclusions vary in size, shape, and structure; they show a

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resemblance to the trachoma bodies of Prowazek. In vernal conjunctivitis, however, the inclusions are most often distributed around the nucleus of the epithelial cell and on its surface; they are seldom encountered in the form of 'caps' characteristic for Prowazek bodies. The inclusions of vernal conjunctivitis stain non-contrastingly with Romanowsky-Giemsa. Large numbers of inclusions are present in clinically active forms only of vernal conjunctivitis. The author thinks that the observed inclusion bodies of vernal conjunctivitis are not only of diagnostic significance, but actually represent specific formations of virus nature.

Dormidontova - Moscow

ZHURIN, P. N.

"Effect of Treatment on the Prowazek's Bodies," Vest. Oftalmol., 28, No. 6, 1949;

Chuvash Sci. Res. Trachoma Inst., -1949-.

ZHURIN, P. N.

"Diagnosis of New Trachoma Infections based on the presence of Prowazek's Bodies,"  
Vest. Oftalmol., 28, No. 6, 1949. Chuvash Sci. Res. Trachoma Inst., -cl949-.

ZHURIN, P. N.

"Epidemiological Method for Diagnosing Infectious Diseases," Sov. Med., No. 8, 1949.

Chuvash Republic Sanitary-Epidemiological Station, -1949-.

USSR/Virology. Chlamydozoa.

E

Abs Jour: Ref Zhur-Biol., No 17, 1958, 76538.

Author : Zhurin, P. N.

Inst

Title : Morphology and Dynamics of Changes of Prowazek's  
Intra-Cellular Bodies in the Course of an Infectious  
Process with Trachoma.

Orig Pub: Sb. nauchn. tr. Chuvashk. n.-i. trachomatozn. in-t,  
1957, vyp. 2, 166-176.

Abstract: Serial scrapings of the conjunctiva epithelium  
of 72 patients with trachoma were studied. It  
is proposed to divide the Prowazek's bodies  
found in different stages of the disease accord-  
ing to form into compact, friable (three degrees)  
and diffuses and according to size into small,

Cards : 1/3

USSR/Virology. Chlamydozoa.

E

Abs Jour: Ref Zhur-Biol., No 17, 1958, 76538.

trachoma, it is proposed to take into account the morphological peculiarities of the Prowazek bodies.

Card : 3/3

11

ZHURIN, R.B.; VUL'FSON, N.S.

Reaction of C-acyla ion of heterocyclic ketonols. Part 2: Synthesis  
of  $\alpha$ -acetyl- and  $\alpha$ -propionyl- $\gamma$ -phenyltetronic acids. Zhur.ob.khim.  
30 no.8:2467-2468 Ag '60. (MIRA 13:8)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i krasiteley imeni K.Ye.Voroshilova.  
(Tetronic acid)



VUL'FSON, N.S.; ZHURIN, R.B.

Reactions of O-acylation of heterocyclic keto-enols. Part 4:5-Acylbarbituric acids. Zhur. ob. khim. 31 no.1:281-283 Ja '61.

(MIRA 1411)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

(Barbituric acid)

ZHURIN, R.B.; VUL'FSON, N.S.

C-Acylation of heterocyclic ketoenols. Part 5: Mechanism of  
the C-acylation of 4-hydroxycoumarin. Zhur. ob. khim. 31  
no.3:875-879 Mr '61. (MIRA 14:3)

1. Institut organicheskikh poluproduktov i krasiteley imeni  
K. Ye. Voroshilova. (Coumarin) (Acylation)

VUL'FSON, N.S.; ZHURIN, R.B.

C-acylation of heterocyclic keto enols. Part 6: Cyclization  
of phenylhydrazones of 3-acyl-4-hydroxycoumarins. Zhur.ob.khim.  
31 no.10:3381-3385 0 '61. (MIRA 14:10)

1. Institut organicheskikh poluproduktov i krasiteley imeni  
K.Ye.Voroshilova.  
(Coumarin) (Hydrazones)

VUL'FSON, N.S., ZHURIN, R.B.

Cyclization of phenylhydrazones of 3-acyl-4-hydroxycoumarins.  
Zhur. VKHO 6 no.2:239-240 '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i krasiteley imeni K. Ye. Voroshilova.  
(Hydrazones) (Coumarin)

ZHURIN, R.B.; LISHENOK, O.Ye.; ABRITALIN, V.L.; SIMONOVA, N.I.

Some derivatives of 3-pyrazolidinone. Zhur.ob.khin. 31  
no.8:2758-2761 Ag '61. (MIRA 14:8)

1. Nauchno-issledovatel'skiy institut organicheskikh polu-  
produktov i krasiteley imeni K. Ye. Voroshilova; Nauchno-  
issledovatel'skiy kino-fotoinstitut i Leningradskiy institut  
kinoinzhenarov.

(Pyrazolidinone)

VUL'FSON, N.S.; ZHURIN, R.B.

Reaction of cycloacylation of heterocyclic keto-enols. Part 7:  
Cyclization of phenyl-hydrazones of 3-acyl-4-hydroxycarbostyrils.  
(MIRA 15:3)  
Zhur.ob.khim. 32 no.3:991-994 Mr '62.

1. Institut organicheskikh poluproduktov i krasiteley i Institut  
khimii prirodnikh soyedineniy AN SSSR.  
(Hydrazones) (Carbostyrils) (Cyclization)

ZHURIN, R.B.; RODICHEVA, D.I.; CHARTORIYSKIY, B.A.

Schiff bases, derivatives of N,N-diethyl-p-phenylenediamine.  
Zhur.ob.khim. 33 no.10:3360-3364 O '63. (NIRA 16:11)

1. Nauchno-issledovatel'skiy institut organicheskikh polupro-  
duktov i krasiteley.

ZHURIN, R.B.; IVINA, V.N.; UL'YANOVA, D.I.

Schiff bases, derivatives of N,N-diethyl-p-phenylenediamine.  
Part 2. Zhur.org.khim. 1 no.2:311-313 F '65.

(MIRA 18:4)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i krasiteley, Moskva.



ABRITALIN, V.L.; ZHURIN, R.B.; SIMONOVA, N.I.; SHEBERSTOV, V.I.;  
SHUL'GINA, O.Ye.

Investigating the developing properties of 1-phenyl pyrazolidone-3  
and other pyrazolidone-3 derivatives. Zhur. nauch. i prikl. fot.  
i kin. 10 no.5:321-329 S-O '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut (NIKFI),  
Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i  
krasiteley (NIOPiK) i Leningradskiy institut kinoinzhenerov (LIKI).

VIL'ISOI, L.S.; ZHURII, R.S.

Synthesis of 3-acyl-4-hydroxy-carbostyryls. Zhur. VIL 5  
no. 3:352-353 '60. (RINA 14:2)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i khimicheskoy izob. K.Ye. Voroshilova.  
(Carbostyryl)

KOPTSOV, N.; ZHURIN, S.

Who is responsible for the output of defective pipes? HFO  
no.9:59 S '59. (MIRA 13:1)

1. Predsedatel' soveta Nauchno-tekhnicheskogo obshchestva 2-go  
Gosudarstvennogo podshipnikovogo zavoda (for Koptsov).
2. Uchenyy  
sekreter' soveta Nauchno-tekhnicheskogo obshchestva 2-go  
Gosudarstvennogo podshipnikovogo zavoda (for Zhurin).  
(Ural Mountain region--Pipe)

ZHURIN, Vladimir Dmitrievich

1962

1964

HYDRAULIC ENGINEERING

DECEASED

FILIPPOV, N. V. (Moskva); ZHURIN, V. V. (Moskva); SULYAYEV, V. A. (Moskva)

Electric discharge in water. Inzh. zhur. 2 no. 4:341-343 '62.  
(MIRA 16:1)

1. Institut mekhaniki AN SSSR.

(Electric discharges)

L 18035-63

EPR/EPA(5)/ENT(1)/BDS

AFFTC/ASD

Pa-4/Pd-4

WN

ACCESSION NR: AP3000724

S/0258/63/003/002/0373/0375

69  
64

AUTHORS: Zhurin, V. V. (Moscow); Sulyayev, V. A. (Moscow); Lukovskiy, V. M. (Moscow)

TITLE: Shock waves in electromagnetic shock tube

SOURCE: Inzhenernyy zhurnal, v. 3, no. 2, 1963, 373-375

TOPIC TAGS: shock wave, ionization, plasma, magnetic dipole, shock tube, discharge, condenser

ABSTRACT: The technique of obtaining strong shocks at high ionization levels in electromagnetic shock tubes was studied. The discharge was obtained from a bank of capacitors (18 microfarad capacity) discharging at 20-kv. Quartz tubes 1000 mm in length and with internal diameters of 11 and 40 mm acted as shock tubes. The gases used were helium and hydrogen, with an initial pressure between 0.05-5 mm Hg. Oscilloscopes and high-speed movie cameras were used to record data. In the experiment pressures up to 2000 atm. were obtained with shock speeds of  $8 \times 10^7$  cm/sec. The electron gas temperature behind the shock was estimated at 700 ev. Unlike the observation by F. R. Scott and R. F. Wenzel (Phys. Fluids, vol. 2, No. 6, 1959) no magnetic dipole was observed in the ionized gas. However, as

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L 18035-63

ACCESSION NR: AP3000724

previous investigators have observed, electron diffusion could be detected ahead of the shock wave. "The author is grateful to A. A. Nikol'skiy for his interest in this investigation and to N. V. Filippov, S. R. Kholov, and A. I. Lashkov for his valuable discussions on the experimental results." Orig. art. has: 1 illustration.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics, AN SSSR)

SUBMITTED: 12Sep62

DATE ACQ: 21Jun63

ENCL: 00

SUB CODE: PH

NO REF SOV: 001

OTHER: 002

Card 2/2

BELOZEROV, A. N.; ZHURIN, V. V.

"Structure of strong shock waves in electromagnetic shock tubes."

report presented at 4th Intl Symp on Rarefied Gas, Toronto, 14-17 Jul 64.



ZHURIN, V.V. (Moscow)

"On some phenomena associated with propagation of magnetically driven strong shock waves through gases".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

AUTHOR: Zhurav, V. V. (Moscow); Koshak, G. K. (Moscow)

... behind a strong shock  
wave in helium.

SOURCE: Inzhenernyy zhurnal, v. 5, no. 1, 1965, 166-169

... computer calculation

ABSTRACT: The authors calculate the temperature behind the front of a strong  
shock wave in helium and the pressure in the rarefaction region.

Card 1/2

L 40759-65

ACCESSION NR: AP5006168

... of the formation potential with pressure. The system of  
... the law of effective mass

WORK: 0015: SEC: 0000

ASSOCIATION: None

SUBMITTED: 02Apr64

ER REF BCY: 003

ENCL: 00

REF CODE: 00

OTHER: 000

Card 2/208

L 54606-65  
ACCESSION NR: AP4004402

was photographed on a spectrograph. To

Card 2/4 3

ACCESSION NR: AP4004402

5. 1. 1944. 21. 1. 1944.

NO. 307: 200

ZHURIN, V.V. (Moskva); KOSTKO, O.K. (Moskva)

Calculating thermodynamic gas parameters beyond a strong shock  
wave in helium. Inzh.zhur. 5 no.1:166-169 '65.

(MIRA 18 4)

VUL'FSON, N.S.; ZHURINA, F.G.; SENYAVINA, L.B.

Reformatskii reaction with bromomalonie ester. Part 3:  
Further study of the reaction of bromomalonie ester with  
benzaldehyde. Zhur. ob. khim. 34 no. 7: 2344-2347. 71 '64  
(MIRA 17:8)

1. Institut khimii prirodnikh soyedineniy AN SSSR i Nauchno-  
issledovatel'skiy institut organicheskikh poluproduktov i  
krasiteley.



S/064/60/000/005/010/021/XX  
B024/B070

AUTHORS: Rozental', L. V., Burdygina, G. I., Korneva, E. D.,  
Zhurina, F. G.

TITLE: Plasticization of Triacetate Cellulose Films by Means of  
Ester Mixtures of Higher Synthetic Fatty Acids ✓

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 5, pp. 15 - 18

TEXT: This paper deals with a study of the plasticizing effect of esters of higher synthetic fatty acids ( $C_6 - C_{16}$ ). It follows from the experiments that low temperatures favor the combination of the plasticizer with triacetate cellulose even when all traces of diluents and solvents are removed from the film. At higher temperatures and higher relative atmospheric humidity, this combination is checked. The number of double bendings endured by the film increases with the increase in the number of carbon atoms in the alcohol radical of fatty acid ester; under the same conditions the plasticizing effect also increases at lower temperatures. For the same number of carbon atoms in the acid

Card 1/2

Plasticization of Triacetate Cellulose  
Films by Means of Ester Mixtures of  
Higher Synthetic Fatty Acids

S/064/60/000/005/010/021/XX  
B024/B070

radical of the esters of higher synthetic fatty acids, their plasticizing effect increases with the increase in the molecular weight of the alcohol radical. There are 5 tables and 4 references: 3 Soviet and 1 German.

ASSOCIATION: NIKFI (Motion Picture and Photography Scientific Research Institute). NIOPIK im. K. Ye. Voroshilova (Scientific Research Institute of Organic Semifinished Materials and Dyes imeni K. Ye. Voroshilov)

Card 2/2

ROZENTAL', L.V.; ZHURINA, F.G.; SMIRNOV, O.K.

Plasticizing action of compounds dissolving cellulose triacetate.  
Zhur.prikl.khim. 35 no.11:2512-2520 N '62. (MIRA 15:12)  
(Cellulose acetate) (Plasticizers)

ROZENTAL', L.V.; BURDYGINA, G.I.; KORNEVA, E.D.; ZHURINA, P.O.

Plasticization of cellulose triacetate films by mixtures of  
esters of higher synthetic fatty acids. Khim.prom. no.5:367-370  
Jl-Ag '63. (MIRA 13:9)

1. Nauchno-issledovatel'skiy kinofotoinstitut i Nauchno-issledovatel'skiy institut organicheskikh poluprovodnikov i krasiteley.  
Im. K.Ye. Voroshilova.

(Cellulose acetate) (Plasticizers) (Acids, Fatty)